CLAIMS

1. Oxygen scavenging composition comprising a polycondensate, a copolymer comprising polypropylene oxide segments and polymer segments and an oxidation catalyst, characterized in that the copolymer has been prepared by copolymerising the corresponding monomers in the presence of functionalised polypropylene oxide segments.
2. Oxygen scavenging composition according to claim 1, wherein the polymer segments are polyamide or polyester.
3. Oxygen scavenging composition according to claim 1 or 2, wherein the polycondensate is (co)polyamide or (co)polyester or mixtures thereof.
4. Oxygen scavenging composition according to any of claim 1 – 3, wherein the polycondensate and the polymer segments are of the same type.
5. Oxygen scavenging composition according to any of claims 1 - 4, wherein the amount of polypropylene oxide segments is from 0.5 to 50 wt% with respect to the composition.
6. Oxygen scavenging composition according to claim 5, wherein said amount is in the range from 1 to 30 wt%.
7 Oxygen scavenging composition according to any of claims 1 - 6, wherein the polypropylene oxide segments are present as conglomerates and at most 25% of the conglomerates have a size above 500nm.
8. Oxygen scavenging composition according to any of claims 1 to 7, wherein the oxidation catalyst is a transition metal salt or complex.
9. Oxygen scavenging composition according to any of claim 1 – 8, having an oxygen barrier lower than 0.3 cc.mm/(m^2·day·atm) when measured according to ASTM standard D3985 under dry conditions on a film having a thickness of 60 µm.
10. Oxygen scavenging composition according to claim 9, having an oxygen barrier lower than 0.1 cc.mm/(m^2·day·atm) when measured according to ASTM standard D3985 under dry conditions on a film having a thickness of 60 µm.

11. Process for preparing an oxygen scavenging composition according to any of claims 1 to 10, characterized in that a polycondensate is melt-mixed with a copolymer that has been prepared by copolymerising the corresponding monomers constituting the polymer segments in the presence of functionalised polypropylene oxide segments and in that an oxidation catalyst is added.

12. Process for preparing an oxygen scavenging composition according to any of claims 1 to 10, characterized in that the copolymer is prepared by copolymerising the corresponding monomers constituting the polymer segments in the presence of functionalised polypropylene oxide segments and the copolymer is melt mixed with a polycondensate and in that an oxidation catalyst is added.

13. Use of the oxygen scavenging composition according to any of claims 1 to 109 or prepared by the process of claims 11 or 12 for the preparation of an oxygen-scavenging object.

14. Use according to claim 13, wherein the object is a container for food, drink or feed packaging such as a film, a bottle, a vessel or a wrap.

15. Use according to claim 13, wherein the object is a multilayer object in which a layer of the oxygen scavenging composition is sandwiched between two layers of another material.

16. Object, having at least one surface that is to be exposed to an oxygen containing environment, and comprising a layer containing the composition according to any of claims 1 to 10 or prepared by the process of claims 11 or 12, in which conglomerates of the polypropylene oxide segments are present, of which conglomerates at least 90% has a dimension in at least one spatial direction that is larger than a dimension in at least one other spatial direction by a factor of at least 1.3, and in which said larger dimension extends in a direction parallel to the at least one surface.

17 Object according to claim 16, wherein the dimension of at most 25% of the conglomerates in a direction perpendicular to the at least one surface is less than 350 nm.

18 Object according to claim 16, wherein the object is a container for food, drink or feed packaging such as a film, a bottle, a vessel or a wrap.

19. Object according to claim 16, wherein the object is a multilayer object in which a layer of the oxygen scavenging composition is sandwiched between two layers of another material.

5